

Central Joint Fire District

Standard Operating Procedure



Central Joint Fire District

SUBJECT: Exposure Control Plan

SOP Number: 601

Effective Date: 5/2/93

Revised Date:

Approved:

PURPOSE: This standard will provide information and guidelines pertaining to “Occupational Exposure to Blood-borne Pathogens” in accordance with the United State’s Department of Labor, Occupation Safety and Health Administration’s Code of Federal Regulations, Title 29: Part 1910.1030.

SCOPE: This standard shall apply to all personnel employed by the Central Joint Fire District.

ENFORCEMENT: The Training Officer shall ensure that annual reviews of the information in this standard are conducted. The Fire chief, or designate, shall ensure that all materials mentioned in this standard are provided and available at all times.

DEFINITIONS:

Blood-Borne Pathogens – Organisms of disease that survive within the human body and may be transmitted to other humans by transfer of blood, body fluids or tissue. They include, but are not limited to:

- 1) Hepatitis B Virus (HBV), which causes Hepatitis, a serious liver disease.
- 2) Human Immunodeficiency Virus (HIV), which causes the fatal Acquired Immunodeficiency Syndrome (AIDS).

Blood, body fluid or tissue – Shall be defined as material consisting of, but not limited to, blood, human tissue or organs other than intact skin, cerebrospinal fluid, synovial joint fluid, pericardial fluid, peritoneal fluid, amniotic fluid, semen, vaginal secretions, any unidentifiable fluids, or saliva containing visible blood. Under circumstances in which differentiation between body materials is difficult or impossible, all body materials should be considered potentially infectious.

Occupational Exposure – shall be defined as contact made while a member is functioning in service to Central Joint Fire District with another person’s blood, body fluid or tissue through, but not limited to, one of the following mechanisms:

- 1) Percutaneous injury such as punctures, lacerations, incisions, or abrasions occurring during victim care or while in direct contact with a victim which results in introduction of victim’s blood, body fluid or tissue into a member’s wound.
- 2) Mucous membrane exposure to blood, body fluid or tissue (e.g. splash to a member’s eyes, mouth, or nose)

- 3) Cutaneous exposure involved large amounts or prolonged contact with blood, body fluid or tissue, especially when a member's skin is chapped, abraded, or afflicted with dermatitis.

APPLICATION: This standard has been adapted with permission using information provided to Wood County Emergency Management Agency by Doulos Training Center, Inc.

601.1 Schedule of Implementation

All provisions within this standard become effective and shall be implemented following final approval of the Fire Chief.

601.2 Determination of Risk Factor

Infection with HBV or HIV represents a small but REAL hazard to CJFD personnel who, as a result of their service to the District, may become infected with blood-borne pathogens. CJFD personnel shall be listed in the following "exposure risk categories".

A. Greater Exposure Risk

CJFD personnel who can reasonably anticipate skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials as a direct result of their duties. Personnel serving in the following duty classifications should be considered to be at greater risk of exposure:

Emergency Medical Technicians (EMT-B, EMT-I, EMT-P)
First Responders

B. Lesser Exposure Risk

CJFD personnel, who while not directly engaged in victim contact as a part of their primary duties, MAY BE AT RISK of accidental exposure as a result of their presence during periods of scene or equipment clean-up. Personnel serving in the following duty classifications should be considered to be at lesser risk of exposure:

Firefighters*
Investigators/Inspectors
Photographers

*Firefighters may be at greater or lesser exposure risk depending on the extent of their individual involvement with victim contact.

601.3 Personal Protective Equipment

Protective Equipment is considered appropriate ONLY if it does not permit blood, body fluids or tissue to pass through or reach the clothing, skin, eyes, mouth, or mucous membranes of CJFD personnel under normal conditions of its use. ALL protective equipment has been chosen on the basis of this criteria, and shall be provided to CJFD personnel and no cost to them. The following equipment shall be available at all times to CJFD personnel:

1. Latex Gloves
2. Face Shields/Masks
3. Eye Shields/Safety Glasses
4. Airway Adjuncts
5. Non-permeable gowns

601.4 Precautions to Prevent Transmission of HBV/HIV in the Work Place

Since pre-hospital emergent care has NO WAY to determine which victim, whether they be trauma or medical patient, may pose the risk of occupational exposure to CJFD personnel, UNIVERSAL PRECAUTIONS for contact with blood, body fluids or tissue MUST BE PRACTICED BY ALL INDIVIDUALS. For those tasks that involve exposure to blood, body fluids or tissue, the following Universal Precautions shall be followed:

- 1) Latex gloves shall be worn when CJFD personnel anticipate any exposure to blood, body fluids or tissue and shall be changed after contact with each individual.
- 2) CJFD personnel whose hands have open wounds, dermatitis, or otherwise compromised skin shall avoid situations with potential for exposure to infectious materials until their skin is intact. If contact cannot be avoided, CJFD personnel with compromised skin MUST don TWO (2) pairs of latex gloves prior to having patient contact.
- 3) Face masks/shields INCOMBINATION WITH Eye Shields shall be worn whenever “splashes, spray, or droplets or blood or body fluids may be generated and eye, nose, or mouth contamination can reasonably be anticipated.” Structural firefighting face shields are not to be used as sole protection for exposure control.
- 4) Though structural fire fighting gear may provide limited protection against blood, body fluid or tissue contact, non-permeable gowns are recommended when dealing with foreign body materials.
- 5) Hands shall be washed as best as possible with soap and water or an acceptable germicidal liquid immediately after gloves are removed. Such germicidal towlettes are available on any apparatus.
- 6) Direct mouth-to-mouth resuscitation will NOT be utilized by CJFD personnel. In the emergent need for airway maintenance and artificial ventilation, the appropriate airway adjunct will be applied. At minimum the patient shall be ventilated with a mouth-shield device.
- 7) Any CJFD personnel who experiences an exposure to blood, body fluid or tissue shall immediately wash the exposed area with soap and/or appropriate germicide and then flush the area with large amounts of water. The personnel shall then notify the Officer in Charge about the exposure, and upon returning to the station, complete and submit Form 1514 to the OIC. If the source patient was taken to a hospital, that hospital shall be

notified as soon as possible about the exposure and any necessary forms completed at the hospital to allow appropriate follow-up care.

8) In summary:

- If it's wet, it's infectious – USE LATEX GLOVES!
- If it could splash – USE EYE SHIELD AND FACE SHIELD!
- If it's airborne – MASK YOURSELF AND/OR THE PATIENT!
- If it could get on your clothes – WEAR AT LEAST YOUR FIREFIGHTING GEAR BUT PREFERABLY A NON-PERMEABLE GOWN!
- If it gets on or in you – LET SOMEONE KNOW!

601.5 Maintenance of Contaminated Wastes

A. Disposable Wastes: All disposable materials that come into contact with blood, body fluid or tissue shall be disposed of in accordance with the applicable regulations of the OSHA requirement and the State of Ohio.

- 1) The disposal of gloves, face masks/shields, or other disposables shall be in appropriately identified receptacles (BIOHAZARD BAGS) used specifically for the storage of possibly contaminated waste. Such Biohazard receptacles will be found on any ambulance, and any waste material is to be placed in the ambulance prior to its departure. If no ambulance is utilized, disposables may be placed in one of the RED plastic bags bearing the label BIOHAZARD that are carried on each truck - under no circumstances are loose, contaminated materials to be placed in CJFD apparatus!
- 2) The RED BIOHAZARD bags containing disposable materials are to be taken to Wood County hospital or placed in the appropriate receptacle in the apparatus bag for transfer to WCH in a timely manner.
- 3) Proper disposal of contaminated equipment and supplies will be strictly followed. The RED BIOHAZARD bags will be disposed of at the Emergency Department following Hospital policy and procedure.

B. NON-Disposable Wastes:

- 1) At the scene, any Reusable or Non-Disposable equipment no longer in patient use shall be contained as best as possible in a RED plastic bag bearing the label BIOHAZARD to prevent contamination of additional equipment prior to decontamination.
- 2) Contaminated linens, towels, or clothing will be placed in a separate RED BIOHAZARD bag prior to decontamination.
- 3) Reusable/non-disposable equipment that has been contaminated will be washed with an acceptable germicide or 10% bleach solution mixed at a ratio of one (1) part bleach with nine (9) parts water. CJFD personnel are to wear latex gloves or other acceptable heavy duty rubber gloves used for cleaning purposes during the decontamination process. The latex gloves will then be disposed of in an appropriate manner; the rubber cleaning gloves and equipment are to be air-dried.
- 4) Contaminated structural firefighting gear shall be cleaned according to manufacturer's recommendations. IMPORTANT – The use of a bleach solution or inappropriate germicide may reduce the gear's fire-retardant properties!
- 5) Decontamination of equipment shall not take place at the CJFD Fire Station, but at Wood County Hospital or a business with appropriate facilities for decontamination.

C. Receptacles:

- 1) TWO (2) plastic receptacles that do not leak and have secure lids bearing the regulation label 'BIOHAZARD' ARE IN THE APPARATUS BAY. On the lids, one is marked "LINEN" and the other is marked "DISPOSABLE". These receptacles shall be used to collect **contaminated materials only** and shall be transferred to the Hospital in a timely manner. Decontamination or disposal shall be according to Hospital policy.

601.6 Exposure Report and Follow-Up

ALL INCIDENTS of exposure where blood, body fluid or tissue made contact with an open cut or sore of CJFD personnel, or a service related injury where CJFD personnel experienced a break in the integrity of his/her skin and thus encountered contamination or unavoidable splashes of blood, fluid or tissue **MUST BE REPORTED IMMEDIATELY** following the exposure. ALL such incidents shall be reported as listed in Form 1514 (Incident Report).

A. Basic information that shall be included:

- 1) Name of CJFD personnel
- 2) Date of exposure
- 3) Time of exposure
- 4) Route of exposure
- 5) Circumstances surrounding related incident
- 6) Name of patient (if known) and Hospital to which they were transported
- 7) Signature of CJFD personnel making report
- 8) Signature of Officer-in-Charge

b. Follow-Up Procedure:

- 1) If the source patient was transferred to a hospital, that hospital shall be notified as soon as possible and any necessary hospital forms completed.
- 2) Form 1514 (Incident Report) shall be passed from CJFD as an official request for notification of exposure in accordance with the Ryan White Act of 1990 to the Emergency Room or Nursing Shift Supervisor within 24 hours of the exposure. The appropriate hospital staff shall then investigate the degree of exposure risk to the CJFD personnel.
- 3) Any results of the Hospital's investigation of the exposure and/or testing of the source individual shall be made available to the exposed personnel and the Fire chief following Hospital policy. The CJFD personnel shall receive a copy of the completed incident report within 15 days of its completion, detailing any action to be taken.
- 4) It is expected that should the need arise, CJFD personnel shall be referred to a physician and offered the option of having his/her blood collected for testing of HIV/HBV serological status. Full confidentiality shall be afforded any person regarding test options and test results following physician and/or Hospital policy.
- 5) It is expected that any necessary post-exposure prophylaxis in accordance with recommendations from a physician and policies of the United States Health Department shall be offered to CJFD personnel.
- 6) All appropriate counseling concerning precautions needed during the period following exposure shall be provided to CJFD personnel. Personnel shall also be

provided information regarding potential illness, signs and symptoms to be alert for, and instructions on how to report any related illness to the appropriate authority.

- 7) CJFD personnel who experience an exposure while in service to Central Joint Fire district shall not be responsible for expenses incurred during evaluation or follow-up. The CJFD Board of Trustees shall ensure that appropriate insurance or Workman's Compensation is available to satisfy any debts or financial obligations.

601.7 Education/Training

A. Initial Education – Form 1515

Initial education about this standard is mandatory for CJFD personnel. Prior to being available for full service, each CJFD personnel shall complete Form 1515 acknowledging initial training, receipt and understanding of the CJFD Exposure control Plan. Form 1515 includes the following information and once completed is to be kept in the members' personnel files.

- 1) Date of training session
- 2) Course content (to include at minimum)
 - a) Review of Blood-borne pathogen standard OSHA CFR 29:1910.1030.
 - b) General explanation of the epidemiology and symptoms of blood-borne pathogens
 - c) Explanation of modes of blood-borne pathogen transmission
 - d) Review of the CJFD Infection Control Plan
 - e) Location of the Station Copy of CJFD Infection Control Plan and Wood County hospital's Exposure Protocol.
 - f) Review of appropriate methods for avoiding exposures
 - g) Review of personal protective equipment and decontamination procedures
 - h) Updated information on the Hepatitis B Vaccine
 - i) Question and Answer Opportunity
- 3) Name and Title of Instructor

B. Annual Review – Form 1516

Annual review of this standard about the policies and procedures concerning exposure to blood-borne pathogens will be conducted. CJFD will schedule a mandatory attendance training session for this specific purpose. Form 1516 shall be completed by personnel at the completion of each annual review and is to be kept in each member's personnel file.

601.8 Hepatitis B Vaccine

- A. All CJFD personnel will be offered the Hepatitis B Vaccine at NO COST to the personnel.
- B. The vaccine will be offered within ten (10) working days of full certification for service to CJFD UNLESS a member provides documentation of having had the vaccine series previously or who wishes to submit to antibody testing which shows the member to have sufficient immunity.

- C. Any CJFD personnel who decline the Hepatitis B Vaccine shall complete Form 1517 which utilizes the wording of the OSHA Standard. The completed form shall be kept in the members' medical files.
- D. Personnel who initially decline the vaccine but later decide to avail themselves of the benefit/protection of the Hepatitis B vaccine shall then receive the vaccine at NO COST.
- E. The vaccine will be administered by the Public Health Department or a licensed medical facility chosen by CJFD Board of Trustees.

601.9 Records

All records pertaining to education and training about blood-borne pathogens, exposures, and Incident Reports/Follow-Up will be maintained in the members' personnel files. These records shall be kept by CJFD for the duration of a member's active service plus thirty (30) years in compliance with the OSHA Standard.

- 1) Training Files: Forms 1515 and 1516 shall be maintained in personnel files as a record of training. The Training Officer shall keep a separate record of attendance at each annual review of SOP 601 – the CJFD Exposure Control Plan.
- 2) Medical Files: A separate, confidential medical file for each CJFD member will be maintained by the Fire Chief. Basic information to be recorded in this file includes:
 - a) CJFD member name and Social Security Number
 - b) Hepatitis B Status: Vaccination Series dates or documented proof of immunity
 - c) Any completed Form 1514 – Exposure Incident Reports
 - d) Results of any test, exam, or other follow-up procedure related to exposures listed in 601.9.2c
 - e) Any completed Form 1518 – Authorization for Release of Medical Information Form 1518, which is authorization for Release of Medical Information, shall be completed by CJFD personnel to access information from this file. Form 1518 shall include:
 - 1. Date of written request
 - 2. Name of Signature of CJFD member whose file is to be accessed
 - 3. Individual to receive the information
 - 4. Description of information to be released
 - 5. Description of purpose for release of information
 - 6. Date when written request expires

601.10 Compliance

- A. Periodic monitoring will be conducted to ensure the adequate presence of materials and adherence to this exposure control standard. If a failure to comply with stated precautions is discovered, counseling, education and/or retraining will be implemented.

B. Repeated refusal by CJFD personnel to follow precautions listed in Section IV that safeguard against exposure to blood-borne pathogens will result in disciplinary action through the standard departmental process that is appropriate to the situation.